

Sidebands

The Newsletter of the **EAST GREENBUSH AMATEUR RADIO ASSOCIATION**



May 2016

President - Tom Scorsone, KC2FCP
Secretary - Russ Greenman, WB2LXC

Vice-President - Steve VanSickle, WB2HPR
Treasurer & Newsletter Editor - Bryan Jackson, W2RBJ

Just Down the Road there's a 250,000 Watt "*Blast from the Past*" Antique Wireless Museum Now Displaying a Voice of America Legend



Several weeks after the Japanese bombed Pearl Harbor in December 1941, the Voice of America made its debut on shortwave radios beyond our borders, broadcasting in German as a new strategy to counter Nazi propaganda and to promote American democracy. As the "cold war" emerged, VOA would continue broadcasting American ideals around the world through entertainment, news and information programs. But as the millennium arrived, VOA's mighty transmitting stations found themselves replaced by satellites and the Internet. By 2007 they had been shuttered and their equipment listed as scrap.

Thankfully one of the largest transmitters ever operated by VOA has been saved for posterity -- a 250 Kw Collins Model 821A-1 that operated at the VOA station in Delano, California. Today, this behemoth has a new home at the Antique Wireless Association's museum in Bloomfield, NY, in the Finger Lakes region of the state. After two years of planning, fundraising and preparation, this shortwave legend is now on display for all to see.

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EGARA Gets Ready for Hamfest 2016

By Liz Gross, W7BYK

May 14th marks the date of EGARA's 13th Annual Hamfest and preparations are well underway for one of the club's biggest yearly events. At the club's monthly member meeting in April, plans for day were reviewed and assignments were handed out to members.

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This event is a great time to socialize with hams you haven't seen in a while, to pick up some new gear and eat good food.

"We expect this year's Hamfest to be the best ever, with hams from all over the region joining us for a day of fun and friendship," said EGARA President Tom Scorsone. Doors will open at 8 am.

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Reminder! EGARA Monthly Meeting
May 11th at 7 pm
Program Topic: Getting Ready for Hamfest!
Plus! Learn CW After the Meeting!

EGARA Elects Officers for 2016-2017 Term



EGARA members elected a new slate of officers during the April membership meeting, retaining **Tom Scorsone**, KC2FCP, as **President** for another term. His candidacy was unopposed.

Other officers elected at the meeting included:

- **Vice President:** Steve VanSickle, WB2HPR
- **Secretary:** Russ Greenman, WB2LXC
- **Treasurer:** Bryan Jackson, W2RBJ

"I am grateful to have been elected for another term," said Tom Scorsone.

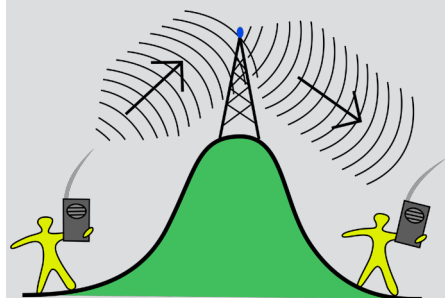
"I look forward to working with all of our members as we strengthen and expand the EGARA. Together, we'll continue to promote every aspect of amateur radio, including the recruitment of new hams -- and, of course, we'll continue our work as an important community resource."

Each officer will serve for a one year term.



Steve VanSickle and Tom Scorsone

Repeater Guidelines Worth Repeating



Repeaters are a great resource for extending amateur communications, but there are FCC rules and regulations that cover their operation. Here's a quick review:

1. There will be a control operator monitoring at all times. If there is no control operator, the repeater will be unavailable. (97.103 and 97.105)
2. Control operators will not discourage anyone from using the repeater.
3. Conduct on the repeaters should be governed by common sense and courtesy. Conversations should be in plain language and suitable for all listeners. (97.112 and 97.113)

4. No commercial business use is allowed.

5. Pause a few seconds between transmissions. The repeater will recycle. This gives a chance for other users or emergency traffic to call in. (Give even a longer pause in winter.)

6. If someone calls "Break", operators will yield the frequency for emergency traffic. Yielding to a "breaking" or new station is common courtesy. New York State and Federal law prohibit interference with emergency traffic.

7. Operators are encouraged to use simplex whenever possible. Operators are encouraged to use the minimum power necessary to maintain clear contact, i.e. 50 Watts or more is not appropriate in close proximity to the repeater when 1 or 5 watts achieve full quieting. (97.313)

8. Use of the repeater for public service events must first be cleared by the repeater custodian.

9. In the event of an emergency (SKYWARN, flooding, weather conditions or other emergencies), the control operator will turn the repeater on if it is not in operation.

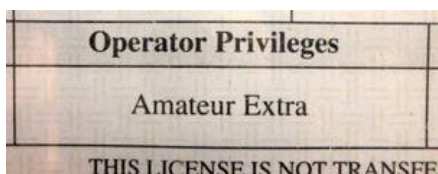
Thanks for these guidelines go to the Schenectady Amateur Radio Association, K2AE.

Why You Should Get Your Extra Class License

By Dan Romanchik, KB6NU

The Amateur Extra Class license is the highest class of license in the United States, and perhaps the world. Many hams—even hams that live outside the U.S.—aspire to pass the test and be awarded one.

There wasn't always an Amateur Extra Class license. The Extra class license, as we know it today,



was created as part of the 1951 license restructuring, that also created the Novice and Technician Class licenses. (In 1951, the Novice license was the “beginner’s license.” To get a Technician Class license, you had to pass the written test that General Class operators had to pass.)

Although it gave an operator no additional privileges, to get an Extra Class license, one had to:

- Pass a 20 wpm code test (Generals had to pass only a 13 wpm code test).
- Pass a longer and more difficult written examination than the General Class exam.
- Have at least two years of experience as an advanced licensed radio amateur.

Today, without the code test and the experience requirement, many hams upgrade to Extra Class as soon as they can. Some even pass the Technician Class, General Class, and the Amateur Extra Class exams in a single test session.

So, what's the attraction? Why should you upgrade to Extra?

One of the reasons that you should upgrade to Extra is that you get use of the entire 80 m, 40 m, 20 m, and 15 m bands. Portions of those bands, such as 3.6 – 3.7 MHz in the 75m band and 14.150 – 14.175 Mhz in the 20m phone band, are reserved exclusively for Extra Class licensees.

Extra Class operators also have exclusive privileges in the CW portions of the 80 m, 40 m, 20 m, and 15 m bands. These are the frequencies where the DX stations hang out.

Another reason to get your Extra Class license is that only Extra Class licensees can administer General Class and Extra Class license exams. General Class operators can become Volunteer Examiners (VEs), but they are only allowed to administer Technician Class exams.

Another reason you might want to get an Extra Class license is to get a fancy vanity callsign. Only Extra Class operators can apply for 1×2 or 2×1 callsigns, such as W8RP or KT8K. A short, snappy callsign can help you work more DX or improve your contest scores.

Whatever your reason, studying for the Extra Class exam will open your eyes to many aspects of the hobby that you may not be familiar with. And, as you work your way through the material, you'll learn things that make you a better amateur radio operator and enable you to enjoy the hobby more.

It's not easy, but in the end, an Extra Class license will help you have more fun with amateur radio.

A list of upcoming test sessions can be found on the next page.

Consider taking your Extra Class test before the FCC Question Pool changes on July 1st!
The new test will be more difficult

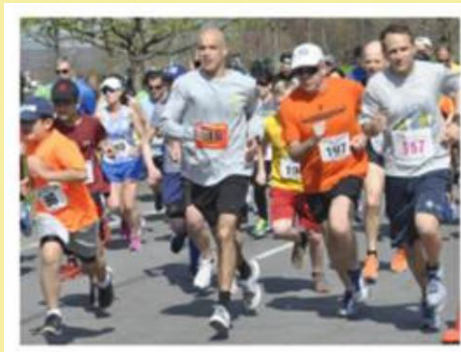
About the Author

Dan, KB6NU is the author of the “No Nonsense” line of amateur radio license study guides, a prolific blogger (www.kb6nu.com), and an active CW operator in the Extra Class portion of the HF bands. If you have any comments or questions, email him at cwgeek@kb6nu.com.

Break Bread with an Elmer

The local chapter of the *Quarter Century Wireless Association* has an informal get-together at the Glenville Queen Diner on the third Saturday of the month at 1 PM. Lunch is on your own – order from their extensive menu and then break bread with the old-timers. QCWA members have been licensed for 25 years or more. The diner is located at 201 Saratoga Road in Scotia, NY (just off RT 50).

Club Members Needed to Support Community Events



May and June will bring community events that will receive communications support from EGARA and members are asked to lend a hand.

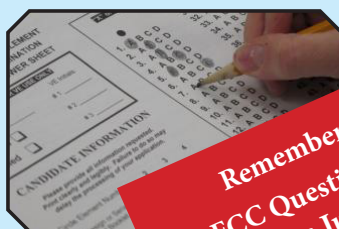
The **Literacy 5K Walk/Run** which will be held on **May 1st** at the RPI Technology Park in East Greenbush with club members relaying information among the event's organizers. Money raised by the run helps support free literacy programs for adults. The Walk/Run runs from 8 am to noon.

Next, **The Run for Help** will be held on **Sunday, June 12th** at the Goff Middle School in East Greenbush. The event is in memory of Liza Ellen Warner and Nikki L. Hart and brings awareness to the serious issue of domestic violence.

Funds raised support The Nikki Hart Children's Memorial Fund and Unity House Domestic Violence Services Program.

EGARA members who would like to help with communications at these events should call Tom Scorsone, KC2FCP, at (518) 272-1494 to RSVP.

Upcoming VE Exam Sessions



May 7th | East Greenbush NY

Sponsor: East Greenbush ARA

Location: East Greenbush Community Library

Time: 10:00 AM (Walk-ins allowed)

May 14th | Troy NY

Sponsor: ATVET

Location: RPI Campus CII Building - Rm 3045

Time: 10:00 AM (Walk-ins allowed)

June 12th | Loudonville NY

Sponsor: Capital Area Radio Enthusiasts

Location: Shaker Road Fire Department

Time: 11:00 AM (Walk-ins allowed)

Find more VE sessions on the ARRL website at:
<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

Local Commuter
Traffic Net Keeps
You Moving

ROAD CLOSED

If you're looking for help with your daily drive on Capital District roadways, **The Commuter Assistance Network** can be a big help.

CAN operates on the 146.94 repeater on workday mornings from 6:00 am to 8:15 am, with custodian Dave Edwards keeping the repeater running in top shape.

The network has two goals:

- To detect problems on area roadways and report them to the proper authorities, and;
- To share information about highway problems with net participants.

All hams are welcome to participate, providing updates on Capital District traffic and roadway conditions.

Jock Elliott, KB2GOM, manages net control for CAN.

Are Kids the Future of Ham Radio?

Some thoughts by Bob Witte, KØNR



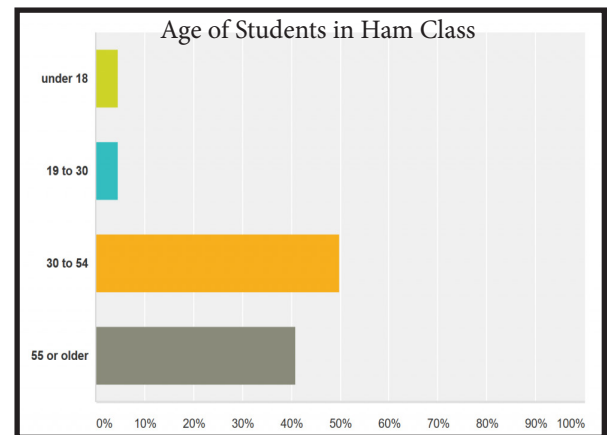
You've heard it a million times: our kids are the future. That statement gets applied to almost everything, including amateur radio. How can you argue with an obvious fact like that? But I am starting to think it is incorrect.

We've had really good success on creating new hams of all ages in our Technician License Class (at the Tri-Lakes Monument Radio Association). We've been doing this for a while now and I think I am seeing a pattern emerge. We've been able to attract middle schoolers to the class and help them get their ham radio license. I've talked to many of them on the air. They've helped out with public service events. They seem to have fun playing with radios.

Then this thing called high school happens. The high school phase is filled with tons of stuff to do: studying, homework, science competitions, sports, dating, movies, driving and after school jobs. Way too much stuff. Ham radio starts to take a backseat to these normal high school activities. Then we don't see the kids at the radio club meetings or chatting on the local repeater because they are busy doing other things. Have we lost them forever? Not sure.

High school is often followed by college which has its own set of challenges: a totally new environment, often away from home, a new set of people, new studies, etc. There might be a ham radio club on campus, but maybe not. If a kid is not off to college they are (hopefully) out doing something to establish themselves in this world. Eventually they emerge on the other side, get a job, get themselves established, sometimes with a spouse and maybe a kid or two. By this time they are 25 to 30 years old, depending on the individual.

I recently posted about the demographics of our students in the Tech License Class. The chart shows the age distribution of our students from our most recent class. Hmmmm, clearly most of our students are 30 or older. (Sorry, we have not collected age data with finer resolution.) This particular class is light on the under 18 crowd...sometimes we have a clump of kids in the mix.



For whatever reason, it seems that most people find themselves in a situation as an adult that causes them to say "I want to get my ham radio license." When asked why they want to get their ham license, the top response is always emergency/disaster communications, followed by backcountry communications, pursuing electronics as a hobby and learning about radio communications. I suspect that starting to be established in a community and having some disposable income also play a role.

My hypothesis is that the most effective way of growing a vibrant ham radio community is to target adults ages 25 to 40.

This age range is more equipped and ready to be ham radio operators and are still young enough that they will be around for a while. Of course, we still want to work with all age groups, including kids and retirees. We've all seen very young hams get the bug for ham radio early and carry it throughout their life. And we also see plenty of older folks get interested in the hobby as they approach or enter retirement. We don't want to miss out on either of those groups. So that's my read on the situation. I've got some data to support my theory but I can't really prove it. What do you think? What are you seeing in your ham radio community?

Bob White's amateur radio blog can be found at <http://www.k0nr.com/wordpress/>

On the Beam

News & Notes

ARRL Asks FCC to Re-Balance 75 & 80 Meter Bands



The ARRL has told the FCC it needs to "re-balance" the 75 and 80 meter bands by correcting a 10-year old FCC error.

"ARRL's proposal is not fairly viewed as a proposal to take anything away from anyone," the League's comments assured. "It is more properly viewed as the effectuation of a fair, equitable, and efficient 'band plan' looking forward for the foreseeable future that balances everyone's needs, and which remedies a plainly unfair plan, imprudently created in the 2006 Report and Order in WT Docket 04-140." The Report and Order can be found on the web at, <http://apps.fcc.gov/ecfs/comment/view?id=5513680269>.

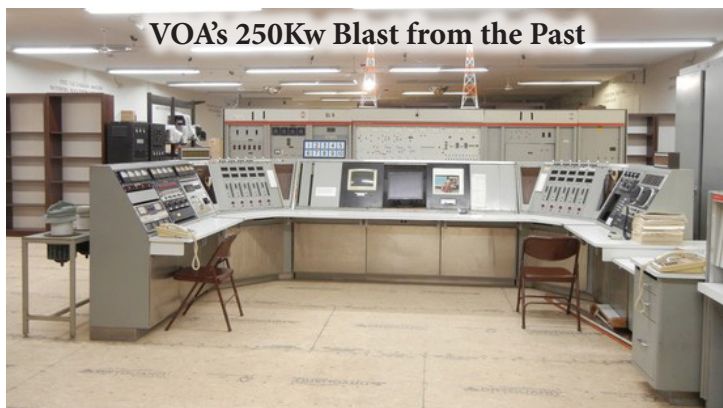
Prompting the League's action were a number of Amateur Extra class operators who felt that reallocating 3600 to 3650 kHz for data modes could prove to be a disincentive for General licensees to upgrade. Others saw it as an unfair spectrum grab. The ARRL noted that prior to 2006, the band was evenly divided between RTTY/data and phone/image sub-bands, with the RTTY/data sub-band extending from 3500 to 3750 kHz, and the phone/image sub-band extending from 3750 to 4000 kHz.

The FCC's phone band expansion reduced 100 kHz of the spectrum between 3500 and 4000 kHz that was previously available to General class licensees, while Advanced licensees lost 75 kHz.

= EGARA May Meeting Minutes =

- The April meeting of the EGARA was called to order at 7 PM by Tom Scorsone, KC2FCP. The minutes of the previous meeting were distributed by email. The Treasurer's report was presented and approved.
- Annual elections were conducted by Ridge Macdonald, KB2HWL, and the following positions were filled:
 - Secretary – Russ Greenman, WB2LXC
 - Treasurer – Bryan Jackson, W2RBJ
 - V. President – Steve VanSickle, WB2HPR
 - President – Tom Scorsone, KC2FCP
- Liz Gross, W7BYK, presented an update on the preparations for the upcoming 13th annual Hamfest, to be held at the Phillips Rd Fire House on May 14th. The supplies and equipment will be moved from storage to the Fire house on Friday at 5:30 PM. Workers are scheduled for 7AM-1PM on the day of the Hamfest. Several tables are already reserved.
- The Run for Literacy event is fully staffed and questions can be directed to Ridge concerning this event. The Run for Help will be discussed at the May meeting. Several members have expressed an interest in helping.
- A brief Show-and-Tell was conducted to help members define and recognize the different quality of coaxial connectors that are available. Several samples of coaxial cable were also available for inspection.
- The next EGARA VE session is scheduled for May 7th at the East Greenbush Community Library. Contact Tom Scorsone for more information.
- Following the formal meeting, a CW practice session was held, led by Tom Scorsone. Refreshments were on hand for all in attendance. The meeting was then adjourned.

Saving the VOA rig -- the largest Collins ever built -- was no small feat. As originally installed in 1965, it weighed in at over 22 tons, stood over 20 feet tall, occupied two rooms totaling over 1000 sq. ft. Other equipment occupied another 400 sq. ft. The 4CV100000C vapor phase cooled power amplifier and modulator tubes weigh in at 95 pounds each. Meanwhile, plate and modulation transformers weighed up to 6000 pounds apiece! In all, it took two tractor trailers to haul the transmitter and its control board from California to New York.



The Antique Wireless Association's job was made easier through an alliance with the Collins Collectors Association, which helped disassemble the transmitter and prepare it for shipment. However, in order to display the unit, AWA also had to expand its museum space in Bloomfield. The eventual cost of the project was put at well over \$200,000. The AWA continues to seek donations to help defray its expenses. Tax deductible donations may be sent to the Antique Wireless Association, c/o Robert Hobday, P.O. Box 421, Bloomfield, New York 14469.



Also new at the museum is Samuel Morse's notebook from 1844 that kept his notes on the first telegraphic line from Baltimore to Washington, D.C.

Other exhibits include the predecessors of the modern cell phone, a replica of the Titanic's wireless room, amateur radios, and various developments in home entertainment. The Museum is dedicated to preserving and sharing the history of the technology used to communicate from the first telegraph message to the latest wireless text messaging.

The Antique Wireless Museum is at 6925 State Routes 5 and 20 in Bloomfield, NY (Take Exit 43 of the NYS Thruway and travel south on Route 21 to Canadaigua then west on Route 20). Hours are 10 a.m. to 3 p.m. on Tuesdays and 1 to 5 p.m. Saturdays and Sundays. Admission is \$7. Teens, kids and AWA members are free. The museum is closed Labor Day weekend and on major holidays. The AWA's website is at: <http://www.antiquewireless.org>.

AWA SPRING MEET and AUCTION **Saturday May 7, 2016 — Bloomfield, New York**

The AWA's Spring Meet Flea Market will be held just across the road from the AWA Museum Complex in Bloomfield, NY. As part of the meet, AWA will hold an auction of surplus or duplicate items from the Museum's collection starting at noon with a preview, and then the auction at 1 pm. Payment must be by cash or check (sorry, no credit cards). The items to be auctioned will be listed on the AWA web site (www.antiquewireless.org).

Starting at 7 am there will be a Flea Market and a bargain table sale. Admission is \$5 for AWA members, with non-members being offered a \$10 combo ticket that includes admission to the museum.

EGARA Gets Ready for Hamfest 2016

(continued from page 1)

"There should also be some great bargains on gear available from the vendors who will be attending," Scorsone added.

The event is open to the public and begins at 8:00 AM at the Phillips Road Fire House located in East Greenbush, NY. The cost is \$6 per person.

There are also limited tailgating spots open on a first come, first serve basis, which are an additional \$6 per parking spot. The call-in frequency will be on the club's repeater at 147.27 MHz with a PL tone of 94.8.

There will be hot food all day including breakfast sandwiches, hamburgers and hot dogs, as well as an assortment of cold drinks and, of course, coffee.

Raffle prizes will be drawn throughout the day beginning at 10:00 AM. These prizes have been generously donated by *Radio Oasis, KJI Electronics, Trojan Electronics and the ARRL*. There will be two grand prize drawings held at the close of the event at 1:00 PM. The grand prizes this year are a dual band HT and dual band mobile rig (valued at over \$300). You must be present to win the grand prizes.

The event has traditionally been the club's biggest fund raiser each year and is only possible by the volunteer work of our club members. If you would like to volunteer, please contact club president, Tom Scorsone, at KC2FCP@nycap.rr.com.

For additional information including driving directions, please click on the Hamfest link on the club's website, W2EGB.org.



Location: 68 Phillips Road, East Greenbush

**Thirteenth Annual Hamfest
Event Schedule**

Saturday, May 14th, 2016 - Rain or Shine!

**East Greenbush Fire Company,
68 Phillips Road, East Greenbush, N.Y.**

Vendor Set-up: 6:00 a.m.
General Public: 8:00 a.m. to 1:00 p.m.
General Admission: \$6

Vendor Pricing

Pavilion: \$6 per table (Tables provided)
Tailgating: \$6 per 8 foot space

Hot Food All Day!

Breakfast: Sandwiches, Doughnuts
Lunch: Hot Dogs, Hamburgers, Chili
Hot and Cold Drinks

Door Prizes*

Drawings starting at 10:00 a.m.

Grand Prize: 2M Mobile Radio!

Grand Prize Drawing at 1:00 p.m.

***MUST BE PRESENT TO WIN**

• Much, much, more •

Looking for Something Special?

If there's a particular item you're looking for at Hamfest, contact Gene at KJI Electronics ahead of time to request it.

Call 973-571-1930 or
Email: K2KJI@AOL.COM



Could a Geomagnetic Storm Destroy Earth's Communications?

Scientists are preparing for a solar storm that could break communications for years and potentially put life on Earth in danger, according to an article carried in Britain's Independent newspaper.



Such a possibility is referred to as a "low probability but high-impact event" -- but government agencies are preparing for it, including the Department of Homeland Security and NASA.

Space weather has previously caused some problems, lightly disrupting technology and leading to visible changes. But none recently have been as dramatic as the infamous Carrington Event of 1859, which caused one of the worst known geomagnetic storms. Such an event would likely throw off much communications technology if it happened today.

Effects of a high intensity geomagnetic storm could stop communications satellites from working, break GPS systems and stop planes from flying. It could also lead to even more lasting problems, like wiping out data from computer memories.

Its effects could last for months or even years, as authorities would have to work to repair the infrastructure that the modern world relies on. Estimates from Lloyd's of London suggest that fixing all of the problems could cost between \$600 billion and \$2.6 trillion.

Now, the US government is looking to work more seriously to stem some of those effects — including getting better at predicting space weather and dealing with problems it would cause.

"We know there is a gap in our ability to assess vulnerability and consequences," said Jack Anderson, a senior analyst for the US Department for Homeland Security, at a conference

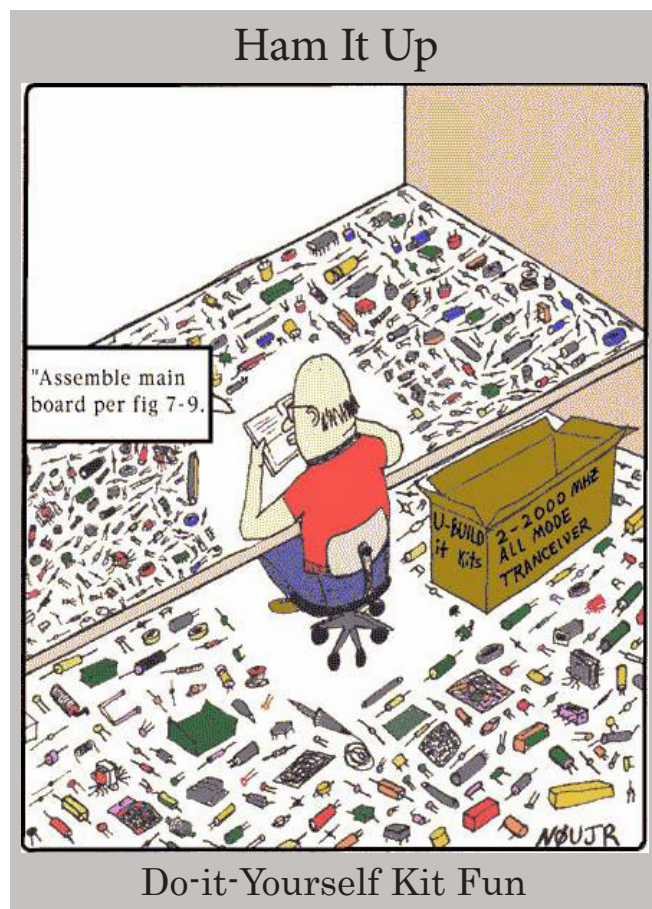
held to plan for the "big one" in storm events.

"Once systems start to fail, (the outages) could cascade in ways we can't even conceive," said Daniel Baker, director of the Laboratory for Atmospheric and Space Physics at the University of Colorado.

Even the role amateur radio would be able to play in such an emergency is unknown. Although hams have a long history of providing communications when regular commercial systems are down, much would depend on how badly atmospheric conditions affected transmission and reception, as well as how badly equipment and antenna systems had been damaged.

During the 1859 Carrington geomagnetic storm, telegraph systems all over Europe and North America failed, in some cases giving telegraph operators electric shocks as their keys threw sparks.

A storm of similar strength was seen in 2012, but it fortunately missed Earth. However, a geomagnetic storm in March 1989 knocked out power across large sections of Quebec.



CALENDAR

May 1, 2016 - Literacy 5K Walk/Run @ 8 am - RPI Tech Park, East Greenbush - Communications support

May 7, 2016 @ 10 am - EGARA VE Exam Session - East Greenbush Library.

May 14, 2016 @ 8 am to 1 pm- 13th EGARA Annual Hamfest, East Greenbush Fire House, 68 Phillips Road.

May 24, 2016 - Orange County Amateur Radio Club Annual Hamfest. Walkill Community Center on Wes Warren Road in Middletown, NY.

June 12, 2016 - Run for Help, Goff Middle School, East Greenbush - Communications support

June 25-26, 2016 - 2016 Field Day - East Greenbush Masonic Temple.

Quick Tip: Keep your soldering iron tip clean

To make good solder joints, you need to keep the tip of your soldering iron clean from any oxides and dust or dirt. A clean, well-tinned tip will transfer heat properly and help you avoid cold solder joints. Many hams use wet sponges to clean soldering iron tips, and many solder stations have troughs to hold these sponges.



But consider an alternate method that uses a wire cleaning pad like the one shown here.

You stick the iron into the pad and then draw it back out. The wire scrapes the oxides and dirt from the tip as you do this.

Proponents of this method also claim that this increases the life of the tip as it avoids the rapid temperature changes that are caused by using a wet sponge.



For Sale

Icom 7100 All-mode transceiver HF / VHF / UHF / S-Star and touch screen - HF 100 watts / 6 meter VHF 50 watts / UHF- 35 watts. Comes with original box, manual, mike, dc power cable, cd and usb cable. \$ 950.00

Kenwood TS 480 HX features all-mode operation from HF - 50 mhz amateur radio band. Separate remote control panel for mobile operation; DSP processing w/ adj filter; 200 watts power on ssb, cw, fsk & fm, 50 watts output on AM; 50 Mhz band 100 watts and 25 watts on AM. \$ 875.00

For two items listed above, contact Tom Scorsone by e-mail at: kc2fcp@nycap.rr.com.

Wanted to Buy

Any old broadcast radios for possible restoration, any brand, style, preferably tubes models. Contact: Steve WB2HPR at 326-0902.

Looking to Buy, Sell or Swap?
Send your info to W2RBJ@outlook.com

The East Greenbush Amateur Radio Association

Organized in 1998, by Bert Bruins, N2FPJ, SK and Chris Linck, N2NEH, the East Greenbush Amateur Radio Association, an ARRL affiliate, is committed to providing emergency services, educational programs, and operating resources to the amateur radio operators and residents of the Capital Region of New York State. The club station is W2EGB. The club also has several VHF and UHF repeaters open to club members and the public.